



Oxytropis nama Nutt., a Wyoming endemic collected by Thomas Nuttall on his journey across Wyoming in 1834

WYOMING NATIVE PLANT SOCIETY

Box 1471
Cheyenne, WY 82003

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Treasurer's Report - Balance as of February 15, 1988: \$691. 61; deposits: dues \$10.50; disbursements: newsletter printing \$17.07, scholarship \$300.00; new balance as of May 1, 1988: \$385.04. RD

Board Meeting - The Board met on March 22 in Laramie to consider Neil Snow's scholarship application, the only one received. Neil received our scholarship in 1987. The Board voted to award a scholarship of \$300 to Neil. Neil's project is "A Floristic Survey of the Headwaters of the Yellowstone River and Surrounding Areas." In the summer of 1987, Neil and two other collectors gathered nearly 3400 specimens from this area. Less than 400 collections have ever been taken from the northern part of the area. The amount of the scholarship was increased this year as a result of contributions from Louis and Terua Williams, Phil White, and Mary Taylor Harris, and the approval of an increased amount by the membership. RD

Annual Meeting - The annual meeting for 1988 will be held July 16 and 17 in the Sierra Madre Mountains between Encampment and Baggs. We will meet at 9:00 AM on Saturday, July 16, at the junction of the Deep Creek Road and Wyoming Highway 70 (the Baggs-Encampment road which is gravel at this point). The junction is about 34 miles east of Baggs or 26 miles west of Encampment. If you arrive on Friday, there are Forest Service campgrounds 5.2 miles east of the junction (Lost Creek) and 7.4 miles east (Haskins Creek). Favorable undeveloped sites are most numerous on the west slope of the mountains. (Side roads can be treacherous if wet.) Be sure to get gas at Baggs (if coming from west) or at Riverside (if coming from east) before entering mountains. The tentative schedule follows. Saturday: business meeting at junction; visit grove of large aspen with understory of subalpine fir; visit gambel's oak stand; look at rare species (*Trillium ovatum*, *Mertensia brevistyla* (Bluebell), *Cypripedium fasciculatum* (Lady Slipper)); visit Battle Pass and Bridger Peak (if accessible); to campsite. Sunday: optional hike on Battle Mountain. Bring plenty of food and water. RD

Dues - Dues are due by the annual meeting. Unless you have paid in advance, a dues notice is enclosed with the newsletter. RD

Election of Officers - Our nominees for officers are: President - Hollis Marriott; Vice-President - Neil Snow; Secretary-Treasurer - Robert Dorn; Board Member - Ernie Nelson. If you wish to nominate (and/or vote) for someone else, submit the name(s) to the Secretary-Treasurer at least a week before the annual meeting. Mail votes are accepted before the meeting. Erwin Evert is the carryover Board Member. RD

Recent Publication - The revised Vascular Plants of Wyoming by Robert Dorn is now available. The 340 pages include keys to 3100 species, subspecies, and varieties with over 250 illustrations. Cost is \$11.50 plus \$1.50 for shipping. Wyoming residents add appropriate sales tax for your county (3% - \$.16, 4% - \$.21, 5% - \$.26). Order from Mountain West Publishing, Box 1471, Cheyenne, WY 82003. Copies will likely be available at the annual meeting if you wish to save the shipping cost. RD

Additional State Records in 1987 - *Hieracium aurantiacum* and *Eleocharis tenuis*, both from Yellowstone National Park. Two other rarities were found in the Park: *Rubus acaulis* and another location for *Trautvetteria carolinensis*. EE

Cacti in Wyoming - Some of the first plants to be protected by the Endangered Species Act were cacti because of the high commercial demand for some of the rarer species. Although Wyoming's eight species have been in some demand, they are mostly relatively common, at least in adjacent states. Four genera are known to occur in Wyoming: *Coryphantha* (Pincushion Cactus), *Echinocereus* (Hedgehog Cactus), *Opuntia* (Prickly Pear Cactus), and *Pediocactus* (Barrel Cactus).

The prickly pears with their jointed, generally flattened, pads are the most conspicuous and common cacti in the state, represented by four species.

Opuntia fragilis, with narrow, nearly cylindric pads, is found on prairies mostly in the eastern third of the state. *Opuntia macrorhiza* is a species of the sand hills along the eastern edge of Wyoming. It has a red, juicy, usually spineless fruit. The most common species is *O. polyacantha* which occurs throughout Wyoming. It is represented by three varieties, two of which are so far known only from Sweetwater County. It usually has yellow flowers but occasional populations with red flowers are encountered in southwest and southcentral Wyoming. The fourth species, *O. erinacea*, is very similar to *O. polyacantha* and so far is known in the state only from Sweetwater County.

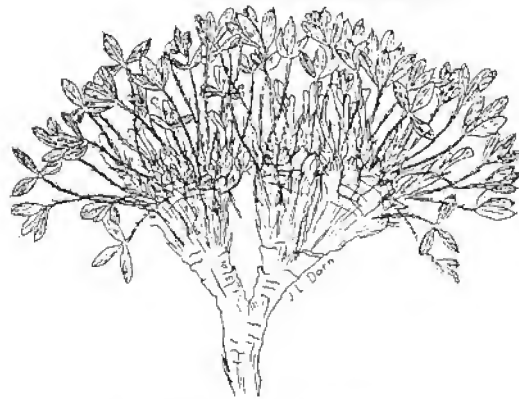
Coryphantha is represented in the state by two species, one with greenish-white or yellowish flowers and one with reddish-pink or pink-purple flowers. *Pediocactus simpsonii* is the common globular cactus with usually pink petals which blooms early in the spring. The last species, *Echinocereus viridiflorus*, is somewhat rare in the southeast part of the state. It usually has greenish-yellow flowers. RD

Botanical Novelties

Astragalus proimanthus Barneby

This member of the pea family was first collected by H. Dwight Ripley and Rupert Barneby in 1946. Barneby described it in 1964. The plant forms small mats about 6 inches across and barely over an inch high. The leaves have 3 leaflets. The flowers are paired, yellowish, and slightly over 1/2 inch in length. The plants grow on whitish shale ridges in a very small area of southwest Sweetwater County. They bloom in early spring.

Precocious Milkvetch



Artemisia porteri Cronq.

Porter Sagebrush

This member of the sunflower family was first collected by C. L. Porter near Sand Draw Oil Field in Fremont County in 1949. It was described by Arthur Cronquist in 1951. The plants form loose mats with stems averaging about 4-6 inches high. The leaves are silvery and either simple and narrow or divided into narrow divisions. Flower heads are about 1/4 inch high. The flowers are yellow and appear usually in July. The plants grow on barren, white clay in eastern Fremont County and barely into Natrona County. RD

Rare Plant Display - Jim Lochlear of the Nebraska Statewide Arboretum has contacted Shane Smith, Director of the Cheyenne Botanic Gardens, in order to initiate the development of a program within Wyoming for the preservation and display of this state's rare plants. The Nebraska Arboretum is currently maintaining specimens of several rare Wyoming plant species and feels that it is more appropriate for these plants to have a permanent place in Wyoming. Shane is interested in establishing such a permanent garden on the grounds of the Botanic Gardens in Lions Park, but because the project only supports two staff members, Shane is looking for some assistance. If any of you are interested in working with Shane on the design and development of this garden or would like to obtain/maintain plant materials for the garden, he would enjoy hearing from you. Shane can be reached at 637-6458 (work) or 638-8603 (home), if you would like more information on this garden. (If you would rather write, drop a note in care of the Secretary-Treasurer.) Shane and I both look forward to meeting with you and discussing this project at an upcoming gathering of the Native Plant Society. PS

Wyoming Botany in the 30's - Louis and Terua Williams, two of our three life members, have kindly contributed some biographical material at my request to include in the newsletter to get an idea of what botanical pursuits were like 50 years ago. The material is too lengthy to include in its entirety so I have taken the liberty to edit it. I have tried to retain the original where it was possible and those passages are enclosed in quotes. RD

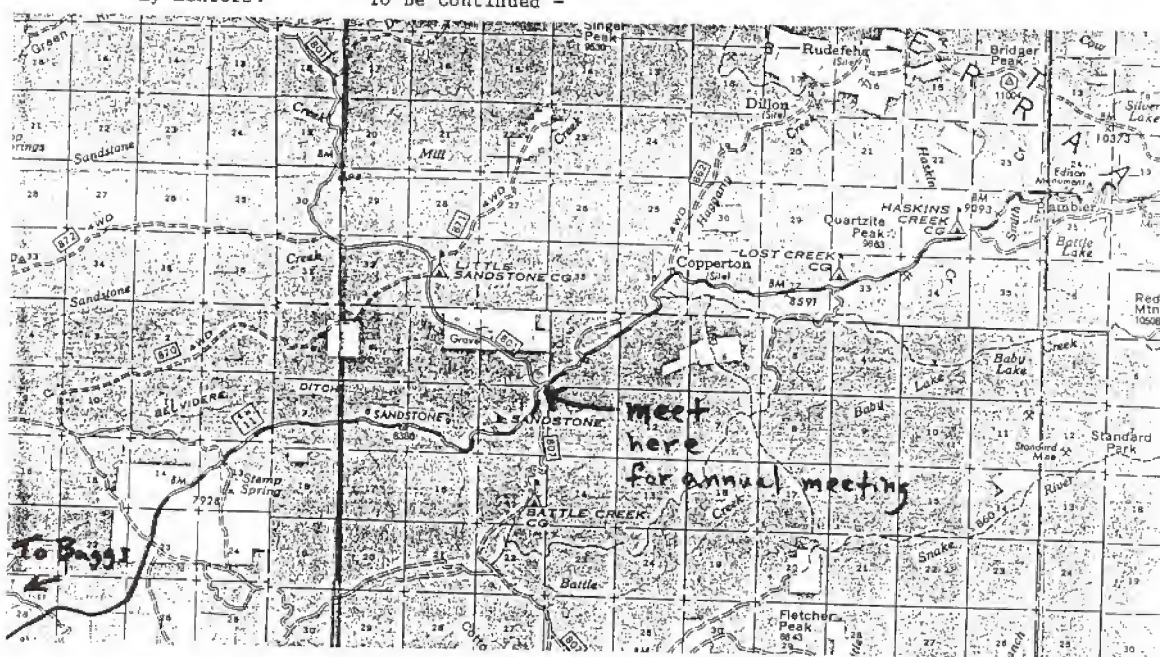
Louis Otho Williams was born in Jackson, Wyoming in 1908, and "childhood ... was spent on a cattle ranch situated half way between Jackson and Wilson near the Snake River." When "Louis was a boy and down along Flat Creek casting for

trout," along "came a man gathering plants. Louis watched for a while until curiosity forced him to speak and to learn why this man wanted the flowers." The man was Aven Nelson.

"Louis attended high school for two years in Jackson. For his third and fourth years he was a student at the University High School in Laramie.... Some years before Episcopalian Bishop Thomas had planned a residence hall in Laramie for the sons of ranchers who did not have access to adequate high schools. I was fortunate in being among the group of young men to come to Sherwood Hall, sons of ranchers from many parts of Wyoming. We attended the University High School and in certain cases we could sit in on classes in the university." Louis "entered the University of Wyoming in Laramie in September of 1928. In June of that year he met Terua Pierson who was teaching school in Jackson Hole.... I got a job at Sherwood Hall as a monitor. This would provide room and board which, with help from home, made it possible to live and pay the modest tuition fees at the University. Summer jobs at the ranch, mostly going on pack trips with "dude" boys, provided \$300-400 toward expenses for the following school year.

Plants, their kinds and their environments, had been a consuming interest since I was a boy. The botany department with Dr. Aven Nelson, whom I had met years before, and two young men Bill Solheim and Ted Porter became the focus of my attention. I graduated eventually with B. S. and M. S. degrees, having taken all the courses offered in botany, in addition to projects thought up by my mentors."

- To Be Continued -



CoNPS 1988 Field Trips The Ft. Collins chapter of the Colorado Native Plant Society welcomes Wyoming NPS members to join them for this summer's field trips. For more information, call Derek Marchi (303 224-3324) or Betsy Neely (303 224-4193).

June 21 (Tuesday): Tour the Ft. Collins Xeriscape Garden...tips on water saving landscaping for your garden. Leader: Tim Buchanan, City Forester. Meet at 6:30 PM at City Hall West, 300 Laporte Ave.

June 25 (Saturday): Mushroom Hunt on Cameron Pass. Leader: Brent Reeves, Prof. of Botany, CSU. Meet at Safeway parking lot, Ft. Collins, at 8:30 AM.

July 9 or 30 (Sat.): The rare North Park Phacelia...search for new populations near Walden. Date to be determined. Leader: Sue Martin, NPS Conservation Chair (call Sue at 303 226-3371 for details).

August 6 (Saturday): Gustav Swanson Prairie Garden Project...search for relict stands of prairie plants for later seed collection. Leader: Alan Carpenter, Range Science Dept., CSU. Meet at 8:30 AM at Safeway parking lot, Ft. Collins.

The Safeway parking lot is on the corner of Mulberry and College. Meet there to receive directions, and then carpool to the fieldtrip site. "Please wear boots and bring sun protection, water and a sack lunch."

Bighorn Canyon Vegetation Study - Botanists from the University of Wyoming have submitted the final report to the National Park Service for the vegetation study on the Bighorn Canyon National Recreation Area (Knight, D. H., G. P. Jones, Y. Akashi, and R. W. Myers. 1987. Vegetation ecology in the Bighorn Canyon National Recreation Area. Montana and Wyoming. Department of Botany, University of Wyoming.) The report, which complements a separate vegetation map for the BCNRA, presents the analysis of data from sampling in 75 grassland and shrubland stands, and from surveys of riparian vegetation and conifer woodlands. It also integrates the BCNRA study with relevant studies in other areas.

Substrate type, elevation, and latitude all influence the distribution of the major vegetation types on the BCNRA, probably through the control these complex environmental factors exert on water availability. Riparian vegetation, of course, depends on abundant subsurface water, and this vegetation type is especially common in the southern portion of the Area along the Bighorn and Shoshone Rivers. (The present report deals only briefly with riparian vegetation, but Yoshiko Akashi is finishing her Master's thesis on the floodplain vegetation along the two major rivers.) Desert shrublands also are common in the south, on fine-textured, often saline, soils derived from shales, and on higher alluvial terraces. The middle portion of the Recreation Area generally lies at higher elevation due to the resistant sandstone and limestone bedrock. Juniperus osteosperma-Cercocarpus ledifolius woodlands cover the rocky slopes and benches here, where fractured bedrock provides reservoirs of soil water. (These woodlands are the northern limit of Utah juniper, and they remind one of the Colorado Plateau.) Level areas support juniper-mountain mahogany woodland, sagebrush steppe (dominated mainly by Artemisia nova), or grassland, depending on soil depth and texture. Summer precipitation increases as one approaches the northern part of the Recreation Area, and grasslands dominated by species from the Great Plains appear in the north. Pinus ponderosa woodlands also show up in the area of Fort Smith. Woodlands of ponderosa pine, Pinus flexilis, Pseudotsuga menziesii, Abies lasiocarpa, and Picea engelmannii blanket the eastern faces of the Pryor Mountains as well. Future research may reveal the importance of fire in the dynamics of these woodlands.

Dennis Knight has a few copies of the report left, and interested readers may request one from him at U. W. Dept. of Botany, Box 3165 University Station, Laramie, WY 82071. GPJ

WNPS Participation in State Parks Summer Programs At the 1987 Wyoming NPS business meeting last July, it was suggested once again that educational programs become part of Society activities. A committee was formed to look into possible channels for setting up programs. In April, having long since forgotten who the other committee members were, I contacted Kerry Kelley of the Wyoming Recreation Commission. Kerry and I decided that the best approach for this summer would be for members interested in giving programs to contact the Superintendent of the appropriate park. Do so as early as possible, as many of the parks provide news releases of upcoming activities to area media. Kerry felt that Park staff would very happy to have members give walks and programs, so here's your chance to be a star! The following list includes State Parks likely to be interested in natural history activities. HJM

| PARK | SUPERINTENDENT | PHONE | PARK | SUPERINTENDENT | PHONE |
|----------------|----------------|----------|-----------------|----------------|----------|
| Curt Gowdy | Kenneth Brecht | 632-7946 | Glendo (maybe) | Gary Weaver | 735-4433 |
| Guernsey | Allen Cowardin | 836-2334 | Keyhole | Louis Sparkman | 756-3596 |
| Boysen (maybe) | Dave Wilson | 876-2796 | Medicine Lodge | David Taylor | 496-2234 |
| Sinks Canyon | Ron Livesay | 332-6333 | South Pass City | Dan Allen | 332-3684 |

Contributors This Issue - RD = Robert Dorn, EE = Erwin Evert, GPJ = George P. Jones, HJM = Hollis J. Marriott, PS = Paige Smith.

Wyoming Native Plant Society T-Shirts will soon be available! The 100% cotton shirts will feature Penstemon caryi, Cary's beardtongue, a plant endemic to the Bighorn and Pryor Mountains. Orders must be placed by July 1. The price is \$8.50 per shirt. Include an additional \$1.50 per shirt to cover the cost of shipping, or you can pick up your shirt(s) at this summer's annual field trip/meeting on July 16. Checks should be made out to the Wyoming Native Plant Society.

WYOMING NATIVE PLANT SOCIETY T-SHIRT ORDER FORM

Size (indicate number of shirts per size): S_____ M_____ L_____ XL_____

Do you want your order shipped to you (yes or no)? _____

Amount enclosed (\$8.50 per shirt, plus \$1.50 per shirt
if shipped): _____

Name: _____

Address: _____

Make checks payable to the Wyoming Native Plant Society and mail to:
Michele Potkin-Stahl, 1008 Park Ave., Laramie, WY 82070 (307 742-0763) by
July 1.



Trillium ovatum
Drawn by Jane Dorn

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Box 1471
Cheyenne, WY 82003